

Emergency Support Function #12 – Energy Annex

ESF Coordinator:

Department of Energy

Primary Agency:

Department of Energy

Support Agencies:

Department of Agriculture
Department of Commerce
Department of Defense
Department of Homeland Security
Department of the Interior
Department of Labor
Department of State
Department of Transportation
Environmental Protection Agency
Nuclear Regulatory Commission
Tennessee Valley Authority

Introduction

Purpose

Emergency Support Function (ESF) #12 – Energy is intended to restore damaged energy systems and components during a potential or actual Incident of National Significance. Under Department of Energy (DOE) leadership, ESF #12 is an integral part of the larger DOE responsibility of maintaining continuous and reliable energy supplies for the United States through preventive measures as well as restorative actions.

Scope

ESF #12 collects, evaluates, and shares information on energy system damage and estimations on the impact of energy system outages within affected areas. The term “energy” includes producing, refining, transporting, generating, transmitting, conserving, building, distributing, and maintaining energy systems and system components. Additionally, ESF #12 provides information concerning the energy restoration process such as projected schedules, percent completion of restoration, geographic information on the restoration, and other information as appropriate.

Policies

- Restoration of normal operations at energy facilities is the responsibility of the facility owners.
- DOE establishes policies and procedures regarding preparedness for and prevention of attacks to U.S. energy sources and response and recovery due to shortages and disruptions in the supply and delivery of electricity, oil, natural gas, and other forms of energy and fuels that impact or threaten to impact large populations in the United States.
- ESF #12 maintains lists of energy-centric critical assets and infrastructures, and continuously monitors those resources to identify and correct vulnerabilities to energy facilities.
- For those parts of the Nation’s energy infrastructure owned and/or controlled by DOE, DOE undertakes all prevention, preparedness, response, and recovery activities.
- ESF #12 addresses significant disruptions in energy supplies for any reason, whether caused by physical disruption of energy transmission and distribution systems, unexpected operational failure of such systems, or unusual economic or international political events.

- ESF #12 addresses the impact that damage to an energy system in one geographic region may have on energy supplies, systems, and components in other regions relying on the same system. Consequently, energy supply and transportation problems can be intrastate, interstate, and international.
- The Cyber Incident Annex to the NRP outlines the provision of Federal cyber incident response coordination among the Federal departments and agencies in response to an Incident of National Significance with cyber-related issues.

Concept of Operations

General

While restoration of normal operations at energy facilities is the primary responsibility of the owners of those facilities, ESF #12 provides the appropriate supplemental Federal assistance and resources to enable restoration in a timely manner.

Collectively, the primary and support agencies that comprise ESF #12:

- Serve as the focal point within the Federal Government for receipt of information on actual or potential damage to energy supply and distribution systems and requirements for system design and operations, and on procedures for preparedness, prevention, recovery, and restoration;
- Advise Federal, State, local, and tribal authorities on priorities for energy restoration, assistance, and supply;
- Assist industry, State, local, and tribal authorities with requests for emergency response actions as they pertain to the Nation's energy supply;
- Assist Federal departments and agencies by locating fuel for transportation, communications, emergency operations, and national defense;
- Recommend Federal actions to conserve fuel and electric power; and
- Provide energy supply information and guidance on the conservation and efficient use of energy to Federal, State, local, and tribal governments and to the public.

Organization

Headquarters

- Provides representatives to the Department of Homeland Security (DHS) Homeland Security Operations Center, Interagency Incident Management Group (IIMG), National Response Coordination Center (NRCC), Regional Response Coordination Center (RRCC), and Joint Field Office (JFO), as required.
- Initially establishes a headquarters-level Emergency Management Team, but transfers operational authority once field capability is established.
- Assesses fuel and electric power damage and energy supply and demand, and identifies requirements to repair energy systems.
- Coordinates with other ESFs to provide timely and accurate energy information, recommends options to mitigate impacts, and coordinates repair and restoration of energy systems.
- In coordination with DHS and State, local, and tribal governments, DOE prioritizes plans and actions for the restoration of energy during response and recovery operations.

Region: Currently DOE does not have a regional response structure, and responds to energy emergencies from its Washington, DC, Headquarters.

State and Local: State and local governments have primary responsibility for prioritizing the restoration of energy facilities. State and local governments are fully and consistently integrated into ESF #12 operations.

Private Sector

- The private sector owns and operates the majority of the Nation's energy infrastructure and participates along with the DOE in developing best practices for infrastructure design and operations.
- The private sector normally takes the lead in the rapid restoration of infrastructure-related services after an incident occurs. Appropriate entities of the private sector are integrated into ESF #12 planning and decisionmaking processes.

Actions

Pre-Incident

- In cooperation with the Energy Sector, ESF #12 develops and, where possible, implements standards for physical, operational, and cyber-security for the energy industry.
- In cooperation with the Energy Sector, ESF #12 sponsors the development of cyber-security software for the energy industry.
- ESF #12 conducts energy emergency exercises with the energy industry, States, and local governments to prepare for energy and other emergencies.
- DOE assists the States in the preparation of State Energy Assurance Plans.
- DOE monitors the energy infrastructure and shares information with Federal, State, and industry officials.

Incident

- Upon activation of ESF #12, DOE Headquarters establishes the Emergency Management Team and activates DOE disaster response procedures.
- DOE assesses the energy impacts of the incident, including resources needed via Emergency Incident and Disturbance Reports from the electric power industry, and provides assessments of the extent and duration of energy shortfalls.
- Provides representation to the DOE Emergency Operations Center, the IIMG, NRCC, RRCC, and the JFO, as required.
- Arranges, as necessary, for ESF #1 – Transportation representation at the regional level.

Post-Incident

- Participates in post-incident hazard mitigation studies to reduce the adverse effects of future disasters.
- When requested, assists the Department of Homeland Security/Emergency Preparedness and Response/Federal Emergency Management Agency (DHS/EPR/FEMA) in determining the validity of disaster-related expenses for which the energy industry is requesting reimbursement based upon the Stafford Act.

Responsibilities

Primary Agency: DOE

- Serves as the focal point for issues and policy decisions relating to energy in all response and restoration efforts.
- Monitors energy system damage and repair work.
- Collects, assesses, and provides information on energy supply, demand, and prices; and contributes to situation and after-action reports.
- Identifies supporting resources needed to restore energy systems.

- Deploys DOE response teams as needed to affected area(s) to assist in response and restoration efforts.
- Reviews and sponsors the energy industry's requests for Telecommunications Service Priority (TSP) assignments to provision new services.

Support Agencies

Agency	Functions
Department of Agriculture	Rural Utilities Service (RUS) <ul style="list-style-type: none"> ▪ Provides advice regarding the restoration of electrical power in RUS-financed systems. This advice includes estimating system damage and the need for local assistance. ▪ Provides emergency credit to RUS-financed rural electrification systems.
	Department of Agriculture, Multifamily Housing: Identifies owners of available apartments in federally funded multifamily housing to provide shelter to emergency response personnel proximal to an electric incident venue.
Department of Commerce/National Oceanic and Atmospheric Administration	Provides current and forecast weather for the incident location.
Department of Defense/U.S. Army Corps of Engineers	Coordinates Emergency Power team missions with power-system restoration activities to establish priorities and efficiently provide support to a facility having power restored.
Department of Homeland Security	Information Analysis and Infrastructure Protection Directorate (IAIP) <ul style="list-style-type: none"> ▪ Develops and maintains a critical infrastructure list of energy facilities. ▪ Develops and maintains a critical assets list of energy facilities. ▪ Identifies and publicizes threats to specific energy facilities. ▪ Coordinates with the private sector to conduct vulnerability assessments associated with terrorism and coordinates the implementation of protective measures.
	Infrastructure Coordination Division: Coordinates with the Infrastructure Liaison concerning all issues dealing with the recovery and restoration of the associated critical infrastructure sector, including the allocation and prioritization of resources.
	IAIP/National Communications System <ul style="list-style-type: none"> ▪ Via ESF #2 – Communications, assists DOE in its efforts to aid the energy industry in providing new services or to restore existing services that are assigned TSP restoration priorities. ▪ Assesses damage to telecommunications identified by DOE as essential for energy system restoration (electrical service priorities).
	Science and Technology Directorate: Provides coordination of Federal science and technology resources as described in the Science and Technology Support Annex.

Agency	Functions
Department of the Interior	Bureau of Land Management <ul style="list-style-type: none"> ▪ Provides information on energy production and supply on onshore Federal lands. ▪ Assesses damage to energy-related infrastructure. ▪ Provides engineering and technical support as necessary. ▪ Develops and maintains information on critical energy-related infrastructure on Federal and tribal lands.
	Bureau of Reclamation <ul style="list-style-type: none"> ▪ Provides technical assistance for the assessment of hydroelectric facilities and flood control actions as they affect energy production. ▪ Uses Bureau of Reclamation personnel to assist in the repair of damaged hydropower generation facilities. ▪ Modifies operations at Bureau of Reclamation facilities to increase electrical generation to supplement losses in areas affected by an incident. ▪ Uses hydroelectric plant internal restart capabilities to assist in restoring the power system if blackouts occur.
	Minerals Management Service <ul style="list-style-type: none"> ▪ For Outer Continental Shelf (OCS) facilities, provides energy production and well reserve information. ▪ Assesses energy production damage and projected repair schedules for offshore facilities. ▪ Assists operators in minimizing the disruption of energy production by expediting review and approval of repair procedures for damaged facilities and/or in the prompt review and approval of proposals to resume production through the temporary rerouting of oil and gas production until permanent system(s) repair can be affected. ▪ Provides engineering and technical support as necessary. ▪ Assists DHS/U.S. Coast Guard in the development of critical asset list of OCS oil and gas facilities. ▪ Monitors and updates critical asset list of OCS oil and gas facilities.
Department of Labor/Occupational Safety and Health Administration	Implements processes identified in the Worker Safety and Health Support Annex to provide technical assistance during the restoration of the Nation's energy systems.
Department of State	<ul style="list-style-type: none"> ▪ Coordinates with foreign nations and international organizations for assistance and information regarding energy supply and system damage. ▪ Assists in implementation of emergency-related international energy agreements.

Agency	Functions
Department of Transportation	<p>ESF #1: Assists with transportation of DOE and ESF #12 personnel, energy restoration equipment, spare parts, and repair personnel to disaster locations.</p> <p>Office of Pipeline Safety: Responds to requests for waivers of restrictions to meet emergency requirements.</p>
Environmental Protection Agency (EPA)	<ul style="list-style-type: none"> ▪ Responds to requests from State and local officials for EPA to exercise enforcement discretion to waive environmental requirements for motor vehicle fuel in order to address supply shortages, normally in the context of natural disasters or significant disruptions in the fuel production or distribution systems. ▪ Coordinates the collection of motor vehicle fuel supply information necessary to evaluate an enforcement discretion request. ▪ Issues enforcement discretions where appropriate to address fuel supply shortages.
Nuclear Regulatory Commission	Regulates the Nation’s civilian use of nuclear fuels and materials to include commercial nuclear power plants. NRC provides information and technical assessment regarding nuclear powerplants.
Tennessee Valley Authority	<ul style="list-style-type: none"> ▪ Assesses supply, system damage, and repair requirements within the Tennessee Valley Authority. ▪ Supplies surplus power as required to the power grid. ▪ Supplies critical replacement parts and equipment as requested. ▪ Supplies technical expertise as requested.